

ABSTRACT

A trivalent chromate coating having improved surface smoothness is used as an alternative to a hexavalent chromate coating serving as a protective coating. A piping member of a steel for an automotive fuel line is coated with a multilayer
5 coating consisting of a plated Zn-Ni alloy film as a bottom layer, a plated Zn film as an intermediate layer overlying the plated Zn-Ni alloy layer, and a trivalent chromate layer as a top layer overlying the plated Zn film.